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REPORT NO. 10

47
COTTON CROP REPORT
SOUTHERN STATES

Cotton Fiber and Processing Test Results

CROP OF

1972



Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE
Memphis, Tenn. 38117 December 22, 1972

This is the tenth of a series of reports of fiber and processing test results from the 1972 cotton crop. Subsequent reports in this series will follow at approximately two-week intervals during the harvesting season, and will be summarized in a comprehensive report at the end of the season. This series will present data on the same subject as "Summary of Cotton Fiber and Processing Test Results, crop of 1971", April 1972. These reports are published by the Standardization Section, Cotton Division, Agricultural Marketing Service, U. S. Department of Agriculture, P. O. Box 17723, Memphis, TN 38117.

COTTON FIBER AND PROCESSING TEST RESULTS, CROP OF 1972

Discussion of Test Results

Cotton testing laboratories of the Agricultural Marketing Service, USDA, report fibers from Southwestern short staple samples tested, to date, are longer, finer and stronger than through the same period a year ago. Shirley Analyzer nonlint content and picker and comber waste are lower than a year ago. Yarns spun from these samples are stronger and show fewer imperfections. Average spinning potential yarn number is higher.

Averages for all medium staple samples tested through December 15, 1972 show shorter fibers than a year ago. Yarns spun from these samples have fewer imperfections.

Southeastern medium staple samples tested show stronger fiber strength this year and both Shirley Analyzer nonlint content and picker and card waste is lower. Yarns spun from these samples are stronger, but have lower yarn appearance grades. Fewer imperfections were shown this year, and average spinning potential yarn number is higher.

South Central medium staple samples are shorter and stronger than last season. Picker and card waste is slightly more this season. Yarns spun from these samples show higher appearance grades than a year ago.

Southwest medium staple samples tested, to date, show weaker fiber strength at zero gage than last season and picker and card waste is higher. Yarns spun from these samples show more imperfections. Average spinning potential yarn number is higher than a year ago.

Medium staple samples tested from the West are shorter, coarser and weaker than last season at this time. Yarns spun from these samples show the strength to be weaker and fewer imperfections than a year ago. Average spinning potential yarn number is lower.

Averages for all long staple samples tested show stronger fibers at zero gage than last year. Both picker and card and comber waste are lower. Yarns spun from these samples are stronger and appearance grades are lower. Imperfections in carded yarn are higher. Average spinning yarn potential number is higher.

Long staple samples from the Southeast are shorter and stronger this year. Shirley Analyzer nonlint content is less this year. Picker and card and comber waste are less than last season. Yarns spun from these samples are stronger, but appearance grades are lower, with more imperfections in the carded yarn. Average spinning potential yarn number is higher.

South Central long staple samples tested are shorter, finer, and stronger than a year ago. Shirley Analyzer nonlint is lower as is picker and card waste. Yarn appearance grades are lower. Spinning potential yarn number is higher.

Long staple samples from the West show about the same fiber test results as last season. Picker and card waste is lower. Yarn appearance grades are lower and more imperfections were noted this season. Average spinning potential yarn number is higher.

No additional extra long staple American Upland lots were received during this report period.

Extra long staple, American Pima, samples from the West are finer than last season. Both picker and card waste and yarn appearance grades are lower than a year ago.

Table 1.--Cotton:

Averages of fiber and processing tests from selected gin points in the United States through December 15, 1972

1/

Staple group Area, and Crop year	Lots tested	No.	Fiber test results						Processing test results						
			Fibrograph		Mike fine- ness		Fiber strength Zero gage		S A nonlint waste		P & C waste		Yarn quality		Spin. Potent.
			2.5% span	50/2.5 unif.	Pct.	Rdg.	Mpsi	G/tex	Pct.	Pct.	Lbs.	Index	22s Carded	Yarn No.	
Short Staple:															
Southwest															
1971	27	0.95	45	4.6	80	20	3.9	6.8	85	117	31	37			
1972	27	0.97	45	4.4	83	20	3.2	6.1	94	119	24	47			
Medium Staple:															
Southeast															
1971	67	1.08	45	4.4	79	22	3.4	6.6	99	109	20	61			
1972	57	1.07	45	4.3	83	23	2.9	6.2	104	103	16	66			
South Central															
1971	141	1.10	45	4.3	81	22	3.0	5.9	103	113	20	62			
1972	146	1.08	46	4.3	83	23	2.8	6.2	104	119	19	64			
Southwest															
1971	28	1.07	45	4.5	86	22	3.1	5.6	103	121	20	59			
1972	32	1.07	45	4.4	83	22	3.2	6.2	102	119	23	62			
West															
1971	59	1.12	45	4.2	93	25	2.7	5.3	121	120	24	70			
1972	52	1.09	45	4.4	90	24	2.6	5.4	110	121	17	66			
U. S. Average															
1971	295	1.10	45	4.3	83	23	3.0	5.9	106	114	21	63			
1972	287	1.08	45	4.4	84	23	2.8	6.0	105	116	18	64			
Significant difference 2/		0.02	2	0.2	2	1	0.5	0.5	4(22s)	5	2	3			

1/
2/

Based on a limited number of samples of modal quality

Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples.

Table 1.--Cotton:

Averages of fiber and processing tests from selected gin points in the United States through December 15, 1972
 1/ (Continued)

Staple group, Area, and Crop year	Lots	Fiber Test Results								Processing Test Results							
		Length		Mike Span	Mike Unif	Strength		SA Non- lint	P&C Waste	Comber Waste		Yarn Quality		Imprfctns		SPY	
		Span	Unif			Zero gage	1/8" gage			combed	carded	Strength	Appearance	carded	combed	carded	
No.	In.	Pct.	Rdg.	Mpsi	G/tx	Pct.	Pct.	Pct.	Pct.	Lbs.	Lbs.	Indx	Indx	No.	No.	No.	
Long Staple: Southeast																	
1971	16	1.14	43	4.3	79	22	4.2	9.7	17.2	102	118	109	118	22	10	65	
1972	17	1.12	44	4.3	85	24	3.6	8.4	16.9	107	124	101	116	24	9	69	
South Central																	
1971	3	1.22	43	4.5	83	24	5.3	9.6	16.4	113	130	107	117	20	9	70	
1972	4	1.16	44	4.0	88	24	4.2	8.8	16.0	116	131	100	110	20	11	75	
West																	
1971	10	1.17	44	3.7	92	26	2.2	8.3	15.8	129	146	101	105	20	12	78	
1972	15	1.17	44	3.6	91	25	2.5	7.2	15.6	126	145	91	100	26	13	86	
U. S. Average																	
1971	29	1.16	43	4.1	84	24	3.6	9.2	16.7	112	129	106	113	21	11	70	
1972	36	1.15	44	4.0	88	24	3.4	8.1	16.1	116	133	97	108	23	11	76	
<u>50's Combed Yarn</u>																	
<u>American Upland</u>																	
<u>Extra Long Staple:</u>																	
West																	
1971	2	1.41	30	4.0	105	30	2.0	8.2	16.0	66	100	10					
1972	1	1.40	31	4.0	108	32	2.3	8.6	16.4	64	100	5					
<u>American Pima</u>																	
West																	
1971	13	1.45	31	3.9	98	32	2.6	8.3	17.3	66	116	2					
1972	14	1.45	32	3.6	98	32	2.6	7.7	17.7	63	111	3					
Significant Difference 2/		0.02	2	0.2	2	1	0.5	0.5	0.5	4(22s)	4(22s)	5	5	2	2	3	

1/ Based on a limited number of samples of modal quality

2/ Minimum differences considered to be significant for comparisons in this table. These guides are based upon averages of a number of lots and are not applicable to individual samples.

Table 2 --Cotton, American upland short staple: Quality characteristics by production areas, crop of 1972

Production Area, Classification				Fiber Test Results								Processing Test Results - Carded Yarns							
No	Sample Number	Digital Fibrograph	Fiber Strength	S.A.	Color	Strength		Elongation	Appearance Index		Imperfect's		Spin Potential						
		Mike	Zero Gage	Non-lint	Raw Stock	P & C	8s or 22s	8s or 22s	8s or 22s	8s or 22s	No	No	No	No	No	No	No	No	
Grade	Staple span	2.5% span	Unif span	1/8" Gage	G/tex	Pct	Pct	Pct	No	Pct	Lbs	Pct	Pct	Pct	No	No	No	No	
32s	In	Pct	Rdg	Mpsi					No	Pct	Lbs	Pct	Pct	Pct	No	No	No	No	
WESTERN NORTHWEST TEXAS AREA																			
ANSON 1 LM	51	31	0.97	44	4.1	74	20	6.2	4.0	4	3	7.1	296	91	7.8	6.3	120	110	58
BIG SPRING 1 MID	31	31	0.94	44	4.1	80	20	5.9	2.9	2	3	5.7	301	90	7.1	5.9	120	120	31
LARIAT 1 LM SP	53	30	0.89	46	3.3	82	22	7.2	6.2	5	6	8.0	336	99	7.5	6.4	120	110	65
LOCKNEY 1 SLM	41	31	0.94	45	3.6	77	21	7.5	2.8	2	3	6.6	310	94	7.5	6.4	120	120	53
WINTERS 2 LM LT SP	52*	31	0.98	44	4.2	78	20	7.1	5.1	5	4	7.9	291	87	7.4	6.0	120	120	55

* Reduced from 42 because of bark

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1972

Production Area, Classification & Sample Number		Fiber Test Results								Processing Test Results - Carded Yarns								
No	Grade	Staple span	2.5% span	Digital Fibrograph	Fiber Strength	Elong- at'n 1/8"	S.A. Non- Lint	Color Raw Stock	P & C Waste	Strength	Elongation	Appearance Index	Imperfect's No	Spin. Potential No				
32s	In	Pct	Ridge	Mike Gage	Zero Gage	1/8"	Gra Yel	22s or 50s	22s or 50s	50s or 22s	22s or 50s	No	No	No	No	No	No	
SOUTHEASTERN AREA																		
ALABAMA																		
CHEROKEE	51	34	1.13	43	4.1	79	22	7.3	3.2	3	34	6.6	4.8	90	70	28	28	
3 LM																	64	
DEATSVILLE	51	35	1.12	44	3.8	85	24	6.0	2.9	3	2	5.8	111	41	6.2	4.7	70	
4 LM																	12	
GERALDINE	3 SLM LT SP	42	33	1.03	46	4.9	81	22	5.8	2.0	3	3	5.6	85	27	5.4	51	
GEORGIA																		
BOSTWICK	51	33	0.97	44	4.4	85	20	5.6	2.7	4	2	6.1	81	25	5.2	3.9	54	
4 LM																	7	
GOUGH	51	34	1.07	46	4.3	87	23	5.5	3.7	4	2	7.6	98	33	5.6	3.9	60	
NORTH CAROLINA																		
LAWRENCEBURG	51	35	1.12	46	4.1	81	23	7.7	6.2	3	2	9.0	111	40	6.7	5.0	70	
3 LM																		
SOUTH CENTRAL AREA ARKANSAS																		
FRENCHMANSBAYOU	3 SLM LT SP	42	35	1.11	45	4.1	81	DPL 23	7.4	3.3	3	100 PERCENT 5.9	107	40	6.2	5.0	67	
GRADY	51	34	1.09	46	4.5	82	23	7.0	3.2	4	3	5.2	105	40	6.1	4.7	69	
PARKIN	51	34	1.07	45	4.1	84	REX SL-66	20	5.6	4.5	5	2	7.0	92	31	5.1	3.6	
3 LM																	58	
WYNNE	51	34	1.07	44	4.5	R3	DELTAPE 22	8.1	4.1	4	2	6.6	104	36	5.9	4.7	61	
LOUISIANA NEWELLTON	3 LM	51	34	1.08	46	4.4	R3	STONEVILLE 22	6.4	2.3	4	2	5.2	102	38	5.9	4.6	69

Table 3 --Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1972--(Continued)

Table 3--Cotton, American upland medium staple: Quality characteristics by production areas, crop of 1972--(Continued)

Production Area, Classification		Fiber Test Results										Processing Test Results - Carded Yarns									
Sample Number	Grade	Digital Fibrograph	2.5% span	Staple	Mike	Strength	Zero 1/8"	Elongat'n 1/8"	S.A.	Color	Raw Stock	P & C	Strength	Elongation	Appearance Index	Imperfect's	Spun.				
No	Name & Code			Unif.	Gage	Gage	Gage	Non-Lint	Grn	Stock	Waste	22s or 50s	22s or 50s	22s or 50s	22s or 50s	No	Potential				
WESTERN TEXAS--(Continued)																					
SIANFIELD	3 SLM	34	1.05	43	4.8	84	23	6.3	2.6	2	2	5.7	92	30	5.2	4.1	120	100	16	12	50
YUMA	2 SLM	41	34	1.06	43	4.5	86	23	6.5	2.6	2	6.0	90	29	5.5	3.6	120	90	18	14	54
NORTHWEST TEXAS--(Continued)																					
CALIFORNIA	BAKERSFIELD	41	36	1.12	46	4.3	94	26	5.8	3.0	2	5.6	116	46	6.1	4.7	120	90	18	14	74
CHOWCHILLA	2 SLM	41	36	1.11	45	4.3	96	26	5.5	2.7	2	5.6	122	49	5.4	4.1	120	100	13	9	73
CORCORAN	3 SLM	41	35	1.12	47	4.1	93	25	6.2	2.8	2	6.0	116	46	5.9	4.4	130	100	17	14	70
EARLIMART	3 SLM	41	35	1.07	44	4.7	98	26	5.1	2.2	3	5.4	113	43	5.0	4.1	120	90	19	14	61
HANFORD	2 SLM	41	36	1.11	45	4.4	101	26	5.2	2.8	2	5.7	116	46	5.2	3.6	120	90	18	13	71
WASCO	3 SLM	41	35	1.07	46	4.3	96	25	6.0	2.9	2	6.0	117	46	5.7	4.4	130	100	16	10	71
WEST TEXAS																					
GARDEN CITY	2 SLM LT SP	42	32	0.99	43	3.9	79	21	6.7	3.4	4	6.6	86	29	5.7	4.6	120	80	41	26	49
PECOS	3 SLM	41	34	1.04	44	3.9	78	19	7.2	3.4	2	6.0	90	30	6.0	4.1	120	90	22	20	56
PECOS	3 SLM	41	34	1.09	41	3.2	73	21	8.4	3.5	1	6.1	94	34	7.1	5.0	120	90	28	10	59

* 100 percent selected for tests, less than 100 percent in the area

Table 4 --Cotton, American upland long staple: Quality characteristics by production areas, crop of 1972

Production Area, Classification				Fiber Test Results								Processing Test Results - Carded Yarns							
Sample Number		Digital Fibrograph	Mike Unif.	Mike Zero Gage	Fiber Strength 1/8"	Elong- at'n 1/8"	S.A. Non- Lint	Color Raw Stock Gra Yel	P & C and Comber Waste	Strength	Elongation	Appearance Index	Imperfect's No	Spin. Potential					
No	Grade	Staple span	32s	In	Mpsi	G/tex	Pct	Pct	No	No	Lbs	Lbs	Pct	No					
SOUTHEASTERN AREA																			
SOUTH CAROLINA																			
RIDGE SPRINGS	51	35	1.14	41	3.6	85	COKER 310	7.1	5.1	3	2 * 16.5	114	42	6.2	5.5	90	80	27	14
4 LM																90	90	11	8
SOUTH CENTRAL AREA																			
MISSISSIPPI																			
MORGAN CITY	51	36	1.13	41	3.2	83	COKER 310	6.6	4.7	4	2 * 17.2	110	42	5.5	4.8	90	60	31	20
4 LM																100	80	19	13
WESTERN AREA																			
NEW MEXICO							ACALA 1517-70	5.8	2.3	1	3 * 17.8	126	49	6.0	5.0	80	60	28	18
ARTESIA	31	36	1.14	41	2.9	91										90	70	12	12
3 MID																			
HAGERMAN							ACALA 1517-V	5.9	3.5	2	3 * 14.7	125	50	6.3	5.1	90	70	29	15
3 SLM	41	37	1.17	44	3.7	89										100	90	9	10
HATCH							ACALA 1517-V	6.4	3.0	1	2 * 14.9	144	55	6.5	5.4				
3 SLM	41	37	1.18	46	3.4	88													
WEST TEXAS																			
EL PASO	41	36	1.14	41	3.2	90	ACALA 1517-C	6.0	2.9	1	2 * 17.7	118	43	6.1	4.6	110	80	8	8
3 SLM																110	90	4	5
EL PASO							ACALA 1517-70	6.0	3.2	2	3 * 16.1	120	47	6.3	4.8	90	70	14	15
3 SLM	41	36	1.15	44	3.4	86										110	80	19	10

* Comber Waste and Combed Yarn Data

1/ 100 percent selected for tests, less than 100 percent in the area

Table 5 --Cotton, American Pima extra long staple: Quality characteristics by production areas, crop of 1972

Production Area, Classification				Fiber Test Results						Processing Test Results - Combed Yarns							
Sample Number		Array Length	CV	Mike Gage	1/8"	S.A. Non-Lint	Color Stock	P & C Comber Waste	Strength	Elongation	Appearance Index	Imperfections					
No	Grade	Style	UQL	Gage	1/8"	Gra. Lint	Yel	12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	50s or 80s or 12 tx	
32s	In	Pct	Rag	Mpsi	G/tex	Pct	Pct	No	Pct	Pct	Pct	Lbs	Lbs	Pct	Pct	No	No
WESTERN AREA																	
ARIZONA CASA GRANDE	5	44	1.48	29	4.0	93	34	7.1	3.8	5	5	70 PERCENT	-	-	-	-	-
SAFFORD	5	44	1.45	31	3.9	100	34	8.3	3.3	5	5	90 PERCENT	-	-	-	-	-
WENDEN	4	44	1.39	33	3.9	94	34	7.8	2.4	4	4	100 PERCENT	-	-	-	-	-
NEW MEXICO COLUMBUS	4	44	1.43	32	3.3	97	33	8.6	2.4	4	5	95 PERCENT	-	-	-	-	-
WEST TEXAS EL PASO	3	4	44	1.43	33	3.2	100	32	8.7	3.1	4	5	98 PERCENT	-	-	-	-
EL PASO	3	4	44	1.43	34	2.9	100	33	8.3	2.8	5	6	99 PERCENT	-	-	-	-

